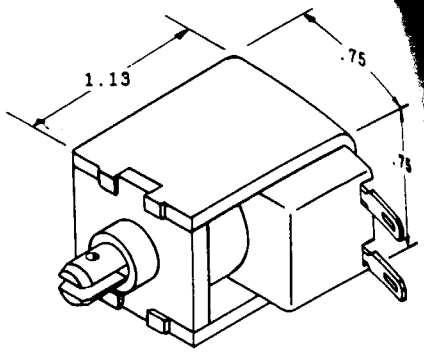
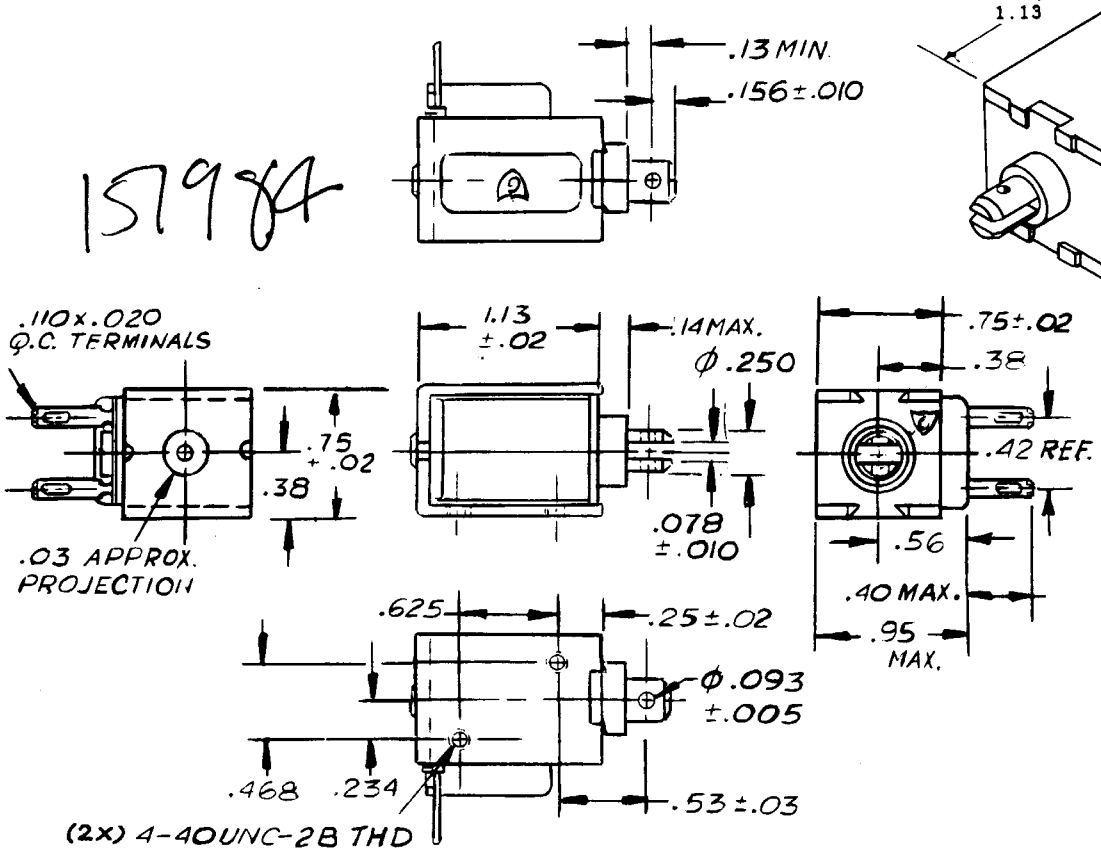
No. 22DC





EQUIVALENT in	mm
1.130	28.70
0.950	24.13
0.750	19.05
0.625	15.88
0.560	14.22
0.530	13.46
0.468	11.89
0.420	10.67
0.400	10.16
0.380	9.65
0.250	6.35
0.234	5.94
0.156	3.96
0.140	3.56
0.130	3.30
0.125	3.18
0.110	2.79
0.093	2.36
0.078	1.98
0.030	0.76
0.020	0.51
0.018	0.46
0.010	0.25
0.005	0.13

DATA AND SPECIFICATIONS

VOLTAGE	TYPICAL COILS CONTINUOUS 3.2 Watts			INTERMITTENT 7 Watts		
	COIL No	OHMS	NI	COIL No	OHMS	NI
6 DC	15	11.5	465	12	5.8	657
12 DC	21	45.7	462	18	22.6	659
24 DC	27	182	455	24	93.2	646
120 AC FWR	40	3732	438	36	1496	710

TYPICAL OPERATE TIME			
62 Deg Plunger Cone Angle	N I (Ampere Turns) 500	1000	2000
PULL IN (Maximum)	60 ms	30 ms	20 ms
DROP OUT (Maximum)	25 ms	45 ms	80 ms

Position = Plunger Down
Stroke = .100 in (2.5 mm)
Load = 4 oz (113 gms)

POWER INPUT RANGE:

Minimum	.8	Watts
Maximum (Continuous Duty)	3.2	Watts
1 Sec on.... (Pulse Duty)	80	Watts
10 Sec on ... (10% Duty Cycle)	24	Watts
100 Sec on ... (25% Duty Cycle)	7	Watts

U/L RECOGNITION:
Recognized under the Component Recognition Program of Underwriters Laboratories Inc.

MAJOR DIMENSIONS:

Length	1.13 in	(29	mm)
Width	.95 in	(24	mm)
Height	.75 in	(19	mm)
Plunger Diameter	.250 in	(6	mm)
Maximum Stroke	.500 in	(12.7	mm)

DIELECTRIC WITHSTAND: ..... 1500 Volts 60 Hz.

COIL LUGS:
Standard .110 in (2.8 mm) by .018 in (.45 mm)
Also available ... Leads, leads with terminals or other terminal types.

INSULATING MATERIALS: (Class "105" Standard)
Coil Bobbin ..... Polyester
Coil Cover (Standard) ..... Polyester
Also available ....Special Hi-Temp Materials

WEIGHT:

Plunger	.22 oz	(6.3	gms)
Total	1.6 oz	(45.4	gms)

PLUNGER CONE ANGLE:
Standard ..... 62 Degrees
Also available ..... Flat, 92 Deg, Custom

Available in push type action. See page 3. *Also available in AC version. See page* 199

COIL DATA CHART**

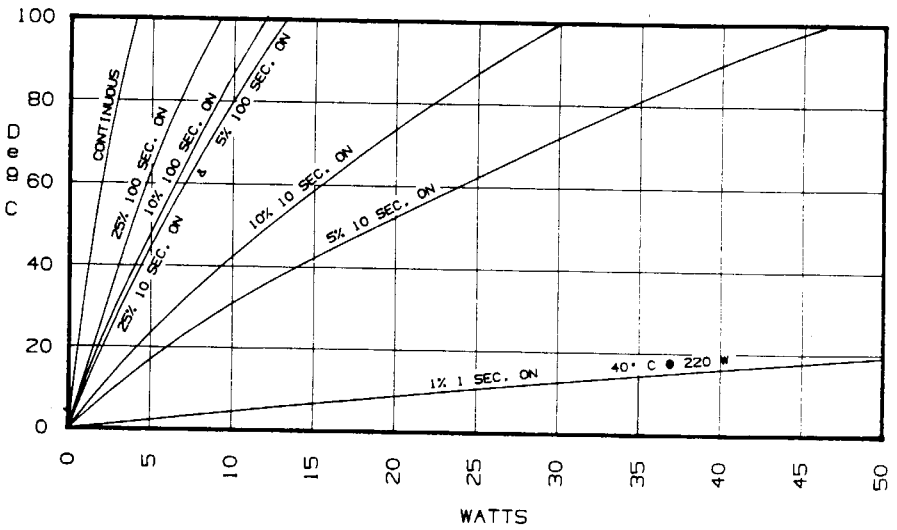
.8 to 80 Watts at + 23 degrees C. * = Full wave rectified unfiltered, RMS

Coil No.	Wire Size	Coil Ohms	Total Turns	6 Volts DC Watts	6 Volts DC NI	12 Volts DC Watts	12 Volts DC NI	24 Volts DC Watts	24 Volts DC NI	120 Volts AC * Watts	120 Volts AC * NI
1	23.5	0.48	188	74.6	2337						
2	24.0	0.61	210	59.4	2081						
3	24.5	0.75	232	48.1	1860						
4	25.0	0.96	264	37.5	1650						
5	25.5	1.21	297	29.7	1471						
6	26.0	1.54	334	23.4	1302						
7	26.5	1.89	364	19.1	1159	76.4	2317				
8	27.0	2.35	407	15.3	1038	61.2	2076				
9	27.5	2.99	460	12.1	924	48.2	1849				
10	28.0	3.75	511	9.6	817	38.4	1634				
11	28.5	4.71	572	7.6	729	30.6	1458				
12	29.0	5.8	640	6.2	657	24.6	1315				
13	29.5	7.4	717	4.8	578	19.4	1156	77.4	2313		
14	30.0	9.5	813	3.8	515	15.2	1029	60.8	2059		
15	30.5	11.5	894	3.1	465	12.5	929	49.9	1858		
16	31.0	15.1	1026	2.4	408	9.5	816	38.2	1631		
17	31.5	18.9	1142	1.9	363	7.6	726	30.5	1452		
18	32.0	22.6	1243	1.6	329	6.4	659	25.4	1318		
19	32.5	29.0	1397	1.2	289	5.0	579	19.9	1158		
20	33.0	36.7	1585	1.0	259	3.9	519	15.7	1038		
21	33.5	45.7	1760			3.2	462	12.6	924		
22	34.0	57.9	1970			2.5	408	10.0	817		
23	34.5	74.4	2222			1.9	358	7.7	717		
24	35.0	93.2	2506			1.5	323	6.2	646		
25	35.5	115	2782			1.2	289	5.0	578		
26	36.0	144	3086			1.0	257	4.0	515	77.1	2265
27	36.5	182	3448					3.2	455	60.9	2001
28	37.0	223	3873					2.6	417	49.7	1834
29	37.5	290	4376					2.0	362	38.2	1592
30	38.0	347	4764					1.7	329	31.9	1449
31	38.5	466	5470					1.2	282	23.8	1240
32	39.0	606	6367					1.0	252	18.3	1110
33	39.5	757	7068							14.7	986
34	40.0	959	7908							11.6	871
35	40.5	1083	8365							10.2	815
36	41.0	1496	10059							7.4	710
37	41.5	1984	11505							5.6	612
38	42.0	2303	12350							4.8	566
39	42.5	2692	13296							4.1	522
40	43.0	3732	15490							3.0	438
41	43.5	4449	16825							2.5	399
42	44.0	5830	19999							1.9	362
43	44.5	7084	21934							1.6	327

* Full Wave, rectified, unfiltered, RMS. TRUE power = approx. 77% APPARENT power. TRUE NI = approx. 88% APPARENT NI.

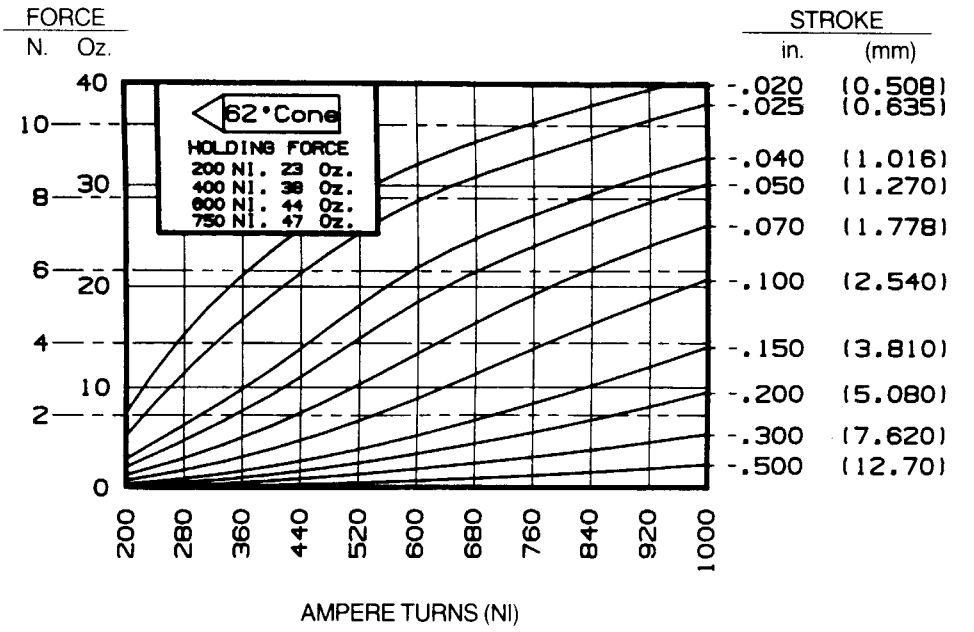
NOTE: **Coil Data Chart to be used in conjunction with NI charts on following page. See instructions on pages 4 and 5.

HEAT RISE

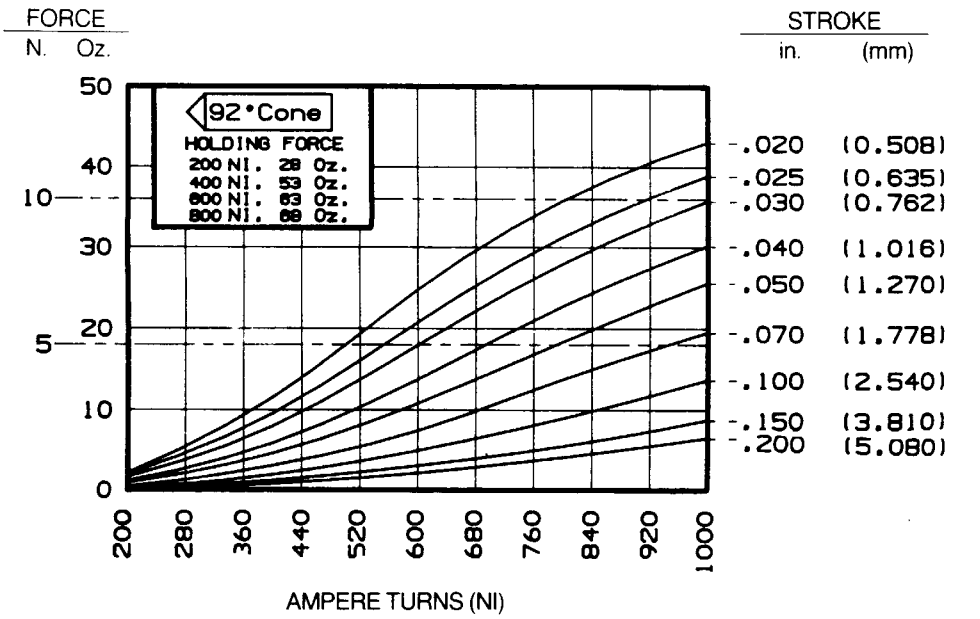


No. 22DC

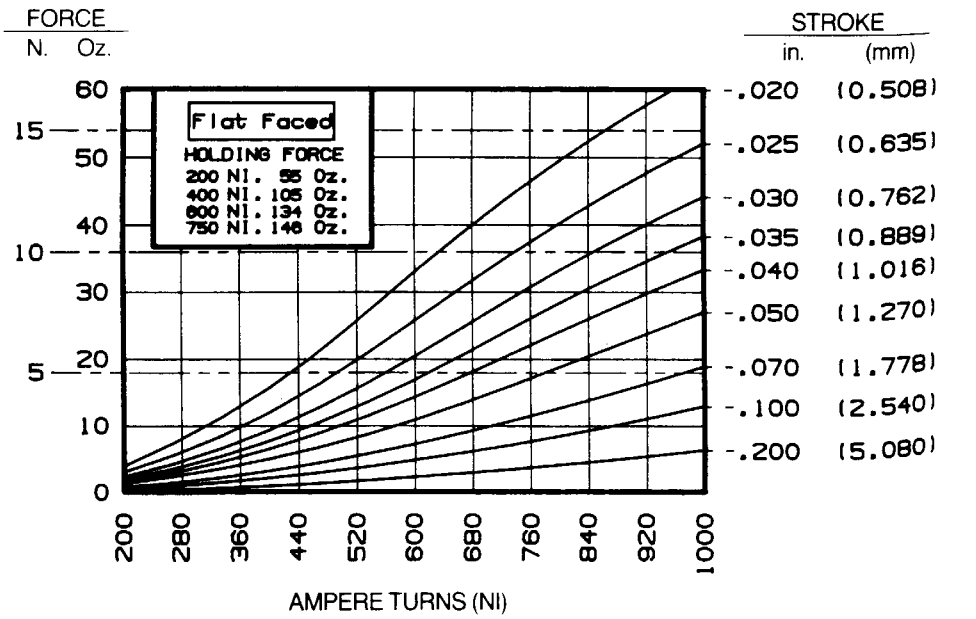
62° Cone

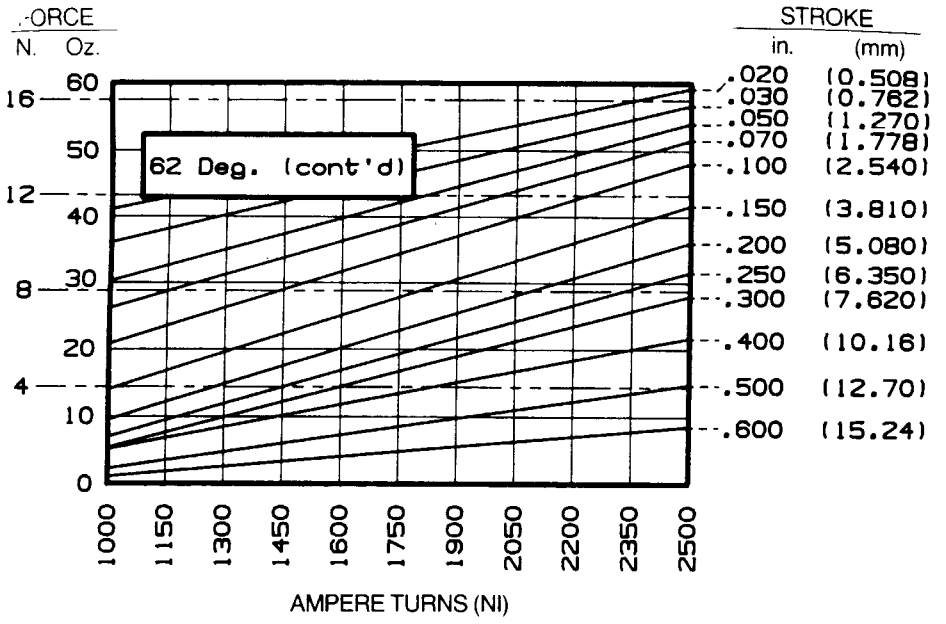


92° Cone

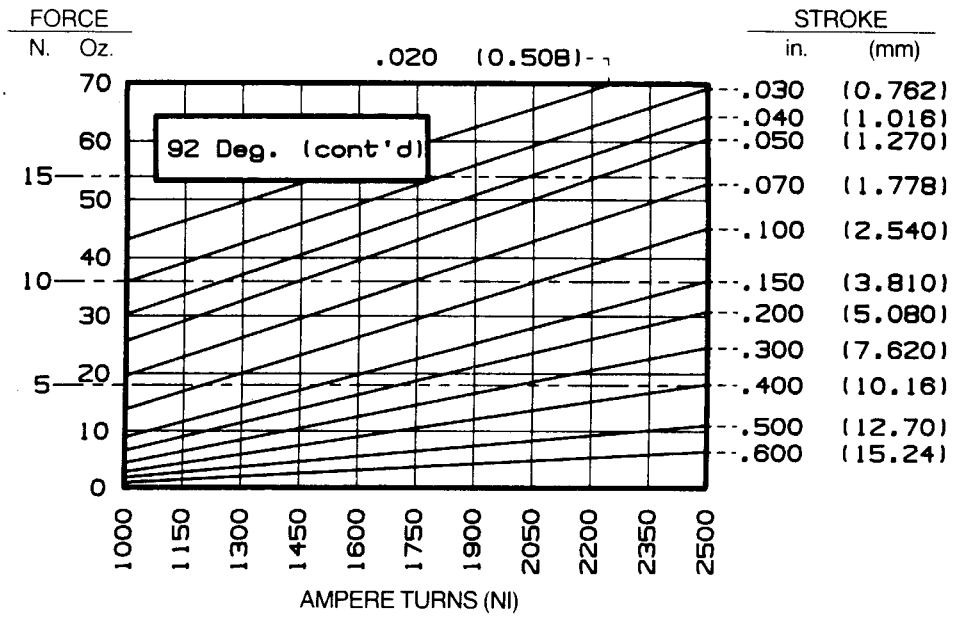


Flat Faced

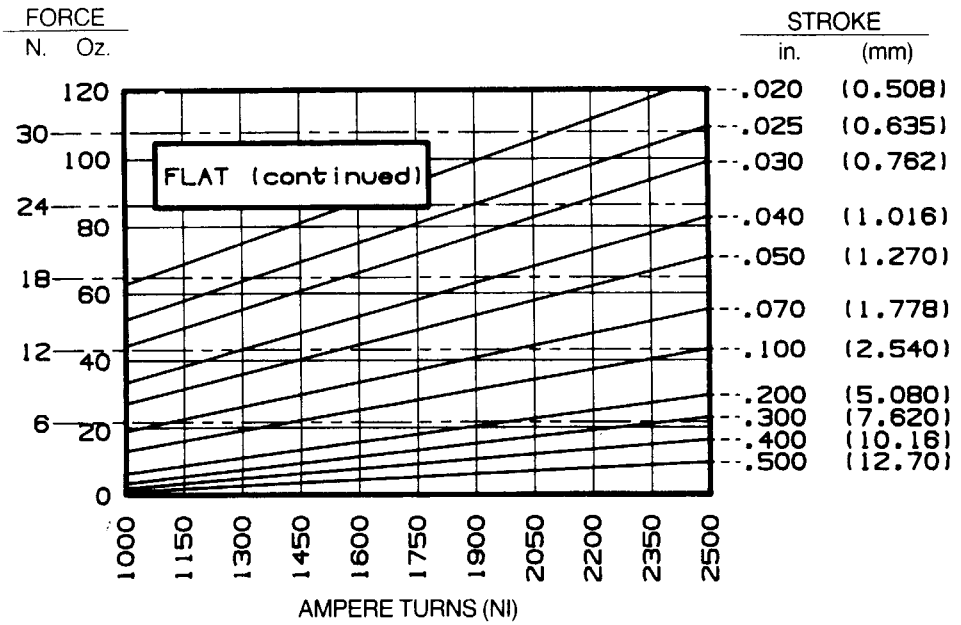




62° Cone
Continued



92° Cone
Continued



Flat Faced
Continued